

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION

2101 WEBSTER STREET, SUITE 500
OAKLAND, CA 94612

TEL: (510) 286-1255

FAX: (510) 286-1380

December 20, 1994
File No. 1114.17(SIM)

Ms Belinda Wei, Project Officer
U.S. Environmental Protection Agency, Region IX
Hazardous Waste Division (H-6-4)
75 Hawthorne Street
San Francisco, CA 94105

Dear Ms. Wei:

**Subject: Quarterly Progress Report for the South Bay MSCA
Fiscal Year 94 for the Quarter 1 July - 30 September 1994**

Attached are two copies of the Quarterly Progress Report. The report covers the tasks in the approved Workplan amendments within the grant amendment award of July 30, 1993.

As before, I would appreciate any constructive comments you may have to assure compliance of and/or improve the usefulness of the report. Please call me (510/286-0304) if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Steve Morse'.

Steve Morse
MSCA Program Manager

Attachment: Quarterly Progress Report (2)

cc: SRR, LPK, SAH, AGL
SWRCB/DAS(Budgets/April Ohara)

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U.S. Environmental Protection Agency, Region IX
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75 Hawthorne Street
San Francisco, CA 94105

Dear Ms. Wei:

**Subject: Quarterly Progress Report for the South Bay MSCA
Fiscal Year 94 for the Quarter 1 July - 30 September 1994**

My apologies. I forgot to complete the Regional Board's activities for the MSCA Quarterly Report for the months of July through September (pages III-1 and III-12) as follows:

| | |
|-------------------|--|
| July: | Hewlett-Packard 1501 Page Mill RAP initial public hearing |
| August: | Hewlett-Packard RAP final hearing and adoption |
| September: | Fairchild (Bernal Rd) and IBM (San Jose) NPDES renewals |
| | Teledyne & Spectra-Physics NBAR hearing |
| | Hewlett-Packard 640 Page Mill RAP final hearing and adoption |

Again, my apologies. Please call me (510/286-0304) if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Steve Morse".

Steve Morse
MSCA Program Managercc: SRR, LPK, SAH, AGL
SWRCB/DAS(Budgets/April Ohara)

QUARTERLY STATUS REPORT

July - September 1994

SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT (MSCA)

EPA GRANT NUMBER V-009403-02-A(10)
(as of July 30, 1993)

State Water Resources Control Board

California Regional Water Quality Control Board
San Francisco Bay Region
South Bay Toxics Cleanup Division

November 15, 1994

**QUARTERLY PROGRESS REPORT
SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT
July - September 1994**

The goals of the MSCA for this phase are:

To accelerate cleanup at Superfund sites in the South Bay.

To augment the RWQCB's existing programs to ensure that the EPA's requirements, as defined in the National Contingency Plan (NCP), are met for those NPL sites assigned to the RWQCB as lead agency.

* * *

The South Bay Multi-Site Cooperative Agreement (MSCA), Phase II, was awarded and accepted by the State Water Resources Control Board effective April 13, 1988. This progress report for this phase is submitted to satisfy the Special Conditions. This report covers the October - December 1993 quarter as amended in subsequent grant offers, the latest being awarded July 30, 1993, to extend the agreement to December 31, 1993, with partial awards of June 1992 and July 1993. An additional extension has been awarded to September 30, 1994 awaiting approval of the 1994-1996 Workplan.

The MSCA Grant provides funding for activities of the state (i.e. State Board and Regional Board) responsible for coordinating and enforcing groundwater cleanup programs at Federal Superfund sites in the South Bay. The estimated expenditures, staff years, and accomplishments are compared to the work plans of January 28, 1988, March 9, 1989, February 13, 1990, January 1991, and January 22, 1992 (with revisions and reductions per Regional Board workplan amendments of May 3, 1993).

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QUARTERLY PROGRESS REPORT
SOUTH BAY MULTI-SITE COOPERATIVE AGREEMENT
July - September 1994

II - SPECIAL CONDITIONS

Besides the tasks in the MSCA's Workplan, some of the grant's Special Conditions require the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Board (RWQCB) to perform certain activities. The Revised Special Conditions responded to here are part of the grant offer of June 5, 1992.

An amended Workplan for 1992-1993 for \$2.35 million was submitted to and approved by the EPA with a partial award June 5, 1992. The most recent award, dated July 30, 1993, was accepted by the State.

Under the terms of the Special Conditions, the Board requested that EPA redirect funds between several of the sites to cover unanticipated costs not budgeted. EPA has agreed to the redirection and included the redirection in the July 1993 grant award. Because the award was later than anticipated, and additional agreed upon work was also needed (and not needed) at some sites, redirection will be needed again. An amended grant budget submitted in June 1994 reflects the proposed redirection and changes.

Due to a change in State accounting to allocate all non-site specific charges monthly (to the

appropriate NPL sites in proportion to staff activity), the grant workplan non-site specific tasks (A, and B) and their accounting records can be misinterpreted. The budget and expenditures shown for this quarterly review are the *total for all sites*. EPA continues to finalize the few remaining MSCA sites for initial demands for cost-recovery started in early March 1992. EPA has to date received significant and substantial payments. It is expected that requests for additional annual cost-recovery payments will be made next year. The State will be working next calendar year to move all (or almost all) of the cost-recovery programs from the Superfund sites within the State system. Details are yet to be worked out; additional coordination with EPA will be necessary to finalize the change-over.

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III - SUMMARY AND STATUS OF MSCA TASKS AND BUDGETS

This Section provides a summary as well as details where necessary on the quarterly progress and status of the MSCA tasks in the Workplan of January 1992 and as approved via the July 1993 grant award.

To accelerate the cleanup at the South Bay Federal Superfund sites the EPA assigned the responsibility along with the necessary augmented funding to the State and Regional Boards to accomplish oversight and regulation of the South Bay Superfund sites under Federal and State law and regulations as well as EPA Guidelines.

In all instances the acute toxics threat and risk at the MSCA sites is now either under interim control (awaiting long-term solutions) due to aggressive earlier Board regulation and requirements for initial and interim investigations, removals, and remediation or the Board and EPA have adopted and the Responsible Parties are (or have) constructed and/or implemented the long-term remediation project to control chronic threats. The Regional Board's efforts are now focused primarily on the remaining sites requiring completion of any necessary investigations and development of cleanup alternatives (i.e. the RI/FS process) and a proposed cleanup plan (the RAP) for public review and comment (See Table, page III-5). After public review and comment, the Board will adopt the RAP in a Site Cleanup Order (i.e. CAO) as modified by public comment, staff recommendations and Board guidance. If EPA approves of the Board's actions and selects the same remedy (RAP), they will administratively adopt a Record of Decision (ROD). Close coordination with EPA is maintained during the process; there is no reason to believe that EPA would not choose the same remedy as the Board.

Significant Events and Activities During the Grant Quarter:

South Bay MSCA Superfund Site Cleanup Decisions (RI/FS/RAP): All the South Bay Superfund sites have accomplished significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet Federal Superfund (all of which the State requires as well) requirements to determine the best alternative considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

Official Board Actions during Quarter:

July:

August:

September:

Other MSCA Events/Activities during the Quarter:

Quarterly Enforcement Meeting: EPA and the Board project staff meet and/or discuss the more active site cleanup progress frequently during the quarter, especially on the few remaining sites awaiting adoption of final cleanup plans and EPA RODs. Several informal meetings and phone conferences were held between EPA and RWQCB management/staff to update EPA and RWQCB staff and determine program and site actions. No joint quarterly meeting was held between Cal/EPA DTSC, EPA, and the Board covering the enforcement status of the South Bay toxics cleanup sites -- either Superfund or non-Superfund. This joint meeting was previously formalized in the updated South Bay Enforcement Agreement. At this time the primary area where the three agencies interface is the Stanford Industrial Park area in Palo Alto, Rhône-Poulenc in East Palo Alto where the DTSC was previously the lead agency, and at United Heckathorn and Liquid Gold sites in Richmond where the Board is a support agency to EPA and DTSC respectively.

South Bay Groundwater Task Force: Due to low past public attendance and interest, future meetings have been canceled unless a specific topic or site arises that warrants reconstitution of the task force. Contact with the usual participants of the Task Force is maintained through individual site-specific contacts.

Board staffing: During the quarter, the Board's staffing in support of the MSCA was satisfactory. Support of an Information System Technician (IST) is provided on an "as needed" basis. The Site Management System (SMS) was finally updated in May 1994 for the first time in two years. In concert with an effort to reduce the amount of resources necessary to produce the Site Management System, the report will be updated through the use of the annual update (first is May 1994) and followups via the

MSCA Tasks Status (cont.)

RWQCB's computer Bulletin Board System (now on-line since March 1993).

1992-1993 MSCA Workplan: The Regional Board submitted the amended 1992-1993 MSCA Workplan in January 1992; the State Board accepted and applied for the amended grant in March 1992; and the EPA awarded the amended Grant in June 1992.

Awaiting completion of the 1994-1996 Workplan and further funding from EPA, and at EPA's request to reduce future funding, the Board applied for a no-cost time extension to September 30, 1994. EPA approved the time extension December 22, 1993.

1994-1996 MSCA Workplan: Regional Board staff forwarded the 1994-1996 Workplan to the State Water Board for submittal to EPA on December 21, 1993. The State Water Board made an official application for the 1994-1996 in the previous quarter and an amended application to better reflect actual funding needed this quarter.

The amended application comes as a result of a meeting with EPA program management in late January, subsequent staff meetings during the previous quarter, and further clarifications and/or modifications of the workplan made in an attempt to match resources needed to EPA obligations. Additionally, EPA and RWQCB staff jointly wish to reduce the transaction costs by making the MSCA a state program with reimbursement directly to the state. These changes should not hold up the award.

EPA Cost-Recovery: In early March 1992, EPA began the process of cost-recovery for the MSCA sites. The demands are for combined costs of the Board (through June 30, 1991) and EPA (through July 31, 1991). By the end of March 1992, several RPs had already paid, and most of the remaining billed sites have paid either in full or partially. A cost-recovery suit has been filed by EPA against Intel, Kim Camp III, CTS Printex, and ADN. Completion of the initial cost-recovery cycle is expected soon and the beginning of a new annual cycle is expected to resume this year. SWRCB is preparing site accounting records as necessary.

Status and Funding of MSCA Tasks:

The *overall total obligated* funding status of the Grant tasks is satisfactory, especially with the new grant supplemental award received July 30, 1993. However, even after the July 30 award, some redirection of grant funds will still be needed between sites due to work necessary (and not necessary) that was not anticipated in the 1993 submittal for an amended award. The overall expenditures do not exceed the total MSCA obligations. The status of the individual tasks (and site budgets) varies (see the individual tasks following for detailed descriptions):

A. Program Management: Normal activities continue with an emphasis on assuring the final adoption of RAPs at several sites -- Rhône-Poulenc (wetlands), Hewlett-Packard 640 & 1501 in late FFY 94, National Semi's OU#2 -- and to assure that time schedules would be met. RD/RA and O&M continues at other sites. Further budget refinements may be necessary to match the grant application to actual award since there has been such a time lag.

B. Site Management System: The SMS was officially updated for distribution in late May 1994 with an "as of" date of early 1994. It now appears that paper copies may still be necessary, at least of a limited nature, on an annual basis at least. After an initial distribution of a limited, copies are made available at a local print shop at their cost as well as by BBS. Interim updates will be maintained on the BBS awaiting the annual update.

D. Community Involvement: Up-to-date and continuing; see specific item. Community Involvement tasks are now accomplished by the respective project manager with some tasks being performed by a designated staff person to coordinate overall activities where necessary. Prior training, extensive planning, and use of PRP staff and resources appear to have made this practical. The impact of this change affects primarily those sites awaiting final RAP/RODs (e.g. National OU#2, both Hewlett-Packard sites (RODs recommendations completed this quarter by RWQCB), and Rhône-Poulenc Wetlands) and will be monitored closely by the Program Manager. Because of the staffing change, the Community Involvement task work is being incorporated into the other tasks, primarily Task A. Program Management and E.2, NPL Oversight, and will not be reported separately in

MSCA Tasks Status (cont.)

this or future quarterly reports unless a significant task or activity is being reported. Overall activities on the sites are reported in Task E.2. and will include Community Involvement activities.

We continue to provide copies to the public of the RWQCB/EPA brochure on "Status of Superfund Groundwater Cleanup in the South Bay" that was published and distributed in November 1993.

E2. NPL Site Oversight: Currently, we are able to keep up with the staff work load although some schedules have slipped and are still slipping [e.g. Rhône-Poulenc/Sandoz (Wetlands OU), National Semiconductor OU#2] due to the complexity of the sites (wetlands and multiple parties respectively). The typical scenario finds that as the cleanup tasks in the RI/FS workplan become solidified and finalized that details formerly unknown or unresolved take on an importance not previously appreciated (e.g. HP sites). Some unforeseen slippages in the current MSCA schedules have occurred and probably will occur again (e.g. agency agreement and oversight for the wetlands cleanup and remediation at Rhône-Poulenc, etc.). State staff will do everything in their power to minimize slippage. Additionally, the utilization of Operable Units is being used where a firm decision can be made on a given unit *and* a final decision on the remainder of the site can not be made for a considerably longer time (e.g. one year or longer). A review of the site schedule (page III-5) indicates actual and probable slippage from the schedules updated for this quarter and as changed since the last quarter's report.

An additional factor that may delay RODs, but probably not the state RAPs is activity by the State Department of Health Services in the preparation of Health Assessments (HA) under contract for the Agency for Toxic Substances and Disease Registry (ATSDR) as required by CERCLA/ SARA. To date, it is still not clear what the significant differences are between ATSDR/DHS' Health Assessments and the Board's BPHE and Risk Assessments or how they will be involved in RAP/ROD decision-making since the HA will not normally be available until after the Board adopts a RAP. To date, no ROD has been knowingly held up because of ATSDR's HA.

Mitigating these potential delays is the fact that the Board has required interim remediation, the definition work has been mostly completed (NSC OU#2), and the Board can implement enforcement quickly where needed and necessary. Staff is aware of slippages and is working to assure completion to the amended schedule as well as preventing further slippage. At this time no enforcement is planned.

Internal over expenditures by site are primarily caused by several administrative problems:

- Within the tasks, CALSTARS reports utilized currently do not provide an appropriate breakout between indirect costs and contract costs.
- Within the task by site, over expenditures are caused by the implementation of specific site budgets where none existed before and unanticipated work or difficulty of work that could not be foreseen by the original budget. With the new award of July 1993, redirection corrected this problem (by task) as it stood then, but additional, unanticipated site work has caused some over expenditures on some of the sites. For tracking purposes, the overall *total* grant budget must be utilized.
- The grant award was late due to delays in the submission and award; earlier over expenditures were covered by the July 1990 and May 1991 award budgets and were partially reconciled with the June 1992 and July 1993 grant award budget redirections. No additional overall funding is requested at this time (excepting the proposed grant award to June 30, 1995), but additional redirections were made with the remaining partial award and will be needed again. A new workplan and budget was requested in December 1993. It is expected that redirections and a "clean-up" and reconciliation adjustment of the grant will be necessary in CY 1995.
- To facilitate cost-recovery, all non-site specific work (Tasks A, B, etc.) is allocated monthly to the MSCA sites in proportion to the site activity for the month. Again, the real test of budget and

MSCA Tasks Status (cont.)

spending at this time is to compare the *total* "bottom line".

Under expenditures are usually caused by changes in work, over estimation of work (usually anticipated problems do not appear), delays in site cleanup (staff work not able to be performed due to project delays and awaiting reports), and changing requirements (reducing significant assistance at the MEW sites).

The table on page III-6 is a summary of the grant budget status of all the sites and shows the approved budget and total accumulated expenditures for staffing, expenses and contracts during the quarter and the life of the Cooperative Agreement (Phase II) since initial award April 13, 1988, including the July 90, May 91, June 92 and July 93 awards. The Regional Board Program Manager may request a redirection between sites to cover overages in 1995. No overall increase in total budget (other than approval of 1994-95 workplan and budget) is foreseen due to these charges at this time (in fact a decrease in budget was proposed for FFY 93 and in future forecasted years).

Forecasted MSCA Tasks and Activities Next 3 - 6 Months:

--Activity continues, as shown in the MSCA Schedule (see page III-5), to develop NSC's OU#2 RI/FS, and finalizing Rhône-Poulenc's Wetlands RI/FS and RAP.

--Maintain time schedules in Community Relations Plans in coordination with overall schedule, especially Hewlett-Packard sites.

SOUTH BAY MSCA SCHEDULE

(updated 12/20/94 by RWQCB; # indicates change since last report)

| Site | RI/FS and RAP Completed and Available for Public Comment | | Final RAP/ROD Adopted | |
|--|--|---------------|-----------------------------|----------------|
| | mo/yr | FFY/Q | mo/yr | FFY/Q |
| 1. Advanced Micro Devices - Arques | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 2. Advanced Micro Devices - Bldg 901/902 | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 3. Advanced Micro Devices 915 | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 4. Applied Materials | RI/FS, RAP adopted; ROD signed/amended; RA and O&M underway | | | |
| 5. CTS Printex | RI/FS and RAP adopted; ROD signed; RA and O&M underway | | | |
| 6. Fairchild, San Jose | RI/FS and RAP adopted; ROD signed; RA and O&M underway | | | |
| 7. Hewlett Packard, 1501 Page Mill | RI/FS compl.; RAP adopted by RWQCB 8/17/94; RA and O&M underway | | | |
| 8. Hewlett Packard, 640 Page Mill | #RI/FS compl.; RAP adopted by RWQCB 9/21/94; RA and O&M underway | | | |
| 9. Hexcel | RAP/ROD Sep 93, but now no longer part of the MSCA (NPL delisting) | | | |
| 10. Intel Magnetics / Micro Storage | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 11. Intel Santa Clara III | RI/FS & RAP adopted; ROD signed; RA and O&M underway | | | |
| 12. International Business Machines | RI/FS and RAP adopted; ROD signed; RA and O&M underway | | | |
| 13. Intersil / Siemens | RI/FS and RAP adopted; ROD signed; RA and O&M underway | | | |
| 14. National Semiconductor | | | | |
| Operable Unit 1 | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| Operable Unit 2 | TBD(late# 95) | TBD(late# 95) | TBD(early 96#) | TBD(early 96#) |
| 15. Rhône Poulenc/Sandoz Crop Prot Corp | | | | |
| Uplands Operable Unit | RI/FS adopted; ROD signed; RA completed 11/92 (Annex ESD 3/94) | | | |
| Wetlands Operable Unit | TBD(7/95?) | TBD (95/3?) | TBD (9/95?) | TBD (95/4?) |
| 16. Signetics | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 17. Solvent Services | RI/FS & RAP adopted; ROD signed; RA and O&M underway | | | |
| 18. Spectra Physics | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 19. Synertek 1 | RI/FS & RAP adopted; ROD signed; RA and O&M underway | | | |
| 20. Teledyne | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 21. TRW/FEI Microwave | RI/FS adopted; ROD signed; RA and O&M underway | | | |
| 22. Van Waters & Rogers | RI/FS and RAP adopted; ROD signed; RA and O&M underway | | | |

TBD=To Be Determined

Notes: Federal lead sites, for which RWQCB receives funding under MSCA for its support activities, have identical milestones, but are not included here since the RWQCB is not directly responsible for meeting those time schedules. The State-required RAPs are final when the NBAR is completed; does not affect the Federal Superfund process, only state required Non-Binding Allocation of Responsibility (i.e. NBAR).

MSCA EXPENDITURE/DRAWDOWN DATA
MULTI-SITE THROUGH 09/30/94

| MSCA PHASE II PROJECT # | ACCOUNT NUMBER | AMOUNT AUTHORIZED | BAL OF AWARD 09-V-005 | AWARD 09-V-009 07/09/93 | TOTAL AUTHORIZED | ALL FISCAL YEAR DATA | | | | |
|-------------------------------|-------------------|----------------------|-----------------------------|-------------------------------|---------------------|----------------------|--------------|------------|--------------|-------------------|
| | | | | | | CUM EXP | CUM DRAWS | DIFF | NEXT DRAW | UNABLE TO DRAW |
| MSCA02-00 | | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MSCA02-01 | | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MSCA02-02 | K382/KN82/KP82 | 157,528.00 | 12,945.00 | 28,000.00 | 198,473.00 | 151,485.31 | 151,131.33 | 353.98 | 353.98 | 0.00 |
| MSCA02-03 | K3H1/KNH1/KPH1 | 130,184.00 | 12,945.00 | 34,004.00 | 177,133.00 | 104,522.30 | 104,481.42 | 40.88 | 40.88 | 0.00 |
| MSCA02-04 | KP83 | 245,248.00 | | 58,743.00 | 303,991.00 | 343,329.35 | 303,991.00 | 39,338.35 | 0.00 | 39,338.35 |
| MSCA02-05 | K384 | 37,378.00 | 11,030.00 | | 48,408.00 | 7,721.47 | 7,721.47 | 0.00 | 0.00 | 0.00 |
| MSCA02-06 | KP82 | 46,543.00 | | 22,760.00 | 69,303.00 | 80,335.53 | 69,303.00 | 11,032.53 | 0.00 | 11,032.53 |
| MSCA02-07 | KN85/KP85 | 271,777.00 | | 165,321.00 | 437,098.00 | 331,148.19 | 330,743.48 | 404.71 | 404.71 | 0.00 |
| MSCA02-08 | KNH9/KPH9 | 407,106.00 | | 152,700.00 | 559,806.00 | 461,601.56 | 453,832.34 | 7,769.22 | 7,769.22 | 0.00 |
| MSCA02-09 | K340/KN40/KP40 | 71,058.00 | 11,030.00 | 27,559.00 | 109,647.00 | 74,125.68 | 72,138.81 | 1,986.87 | 1,986.87 | 0.00 |
| MSCA02-10 | K388 | 38,408.00 | | | 38,408.00 | 6,003.90 | 6,003.90 | 0.00 | 0.00 | 0.00 |
| MSCA02-11 | KP88 | 118,452.00 | 11,030.00 | 18,150.00 | 147,632.00 | 153,833.77 | 147,632.00 | 6,201.77 | 0.00 | 6,201.77 |
| MSCA02-12 | KN87/KP87 | 170,899.00 | 11,030.00 | 18,150.00 | 200,079.00 | 195,220.32 | 195,867.63 | (647.31) | (647.31) | 0.00 |
| MSCA02-13/20 | KNJ2/KPJ2 | 118,345.50 | 11,030.00 | 30,164.00 | 159,539.50 | 123,777.03 | 123,980.78 | (203.75) | (203.75) | 0.00 |
| MSCA02-14 | KP89 | 47,178.00 | | 28,371.00 | 75,549.00 | 61,829.80 | 62,027.06 | (197.26) | (197.26) | 0.00 |
| MSCA02-15 | K3C7 | 4,620.00 | | | 4,620.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MSCA02-16 | KP90 | 217,117.00 | | 49,803.00 | 266,920.00 | 255,078.03 | 255,322.71 | (244.68) | (244.68) | 0.00 |
| MSCA02-17 | KP91 | 300,623.00 | | 33,085.00 | 333,708.00 | 395,932.86 | 333,708.00 | 62,224.86 | 0.00 | 62,224.86 |
| MSCA02-18 | K3H5/KNH5/KPH5 | 151,844.00 | 10,063.00 | 17,889.00 | 179,796.00 | 159,148.86 | 159,165.17 | (16.31) | (16.31) | 0.00 |
| MSCA02-19 | K393 | 28,408.00 | | | 28,408.00 | 5,880.53 | 5,880.53 | 0.00 | 0.00 | 0.00 |
| MSCA02-20 | K3J2 | 118,345.50 | | | 118,345.50 | 102,166.44 | 102,265.21 | (98.77) | (98.77) | 0.00 |
| MSCA02-21 | KN94/KP94 | 125,380.00 | 12,945.00 | 31,904.00 | 170,229.00 | 135,093.83 | 133,752.73 | 1,341.10 | 1,341.10 | 0.00 |
| MSCA02-22 | K3K1/KNK1/KPK1 | 162,354.00 | 14,530.00 | 31,958.00 | 208,842.00 | 163,593.23 | 159,342.02 | 4,251.21 | 4,251.21 | 0.00 |
| MSCA02-23 | K3K3/KNK3/KPK3 | 127,045.00 | 11,030.00 | 18,150.00 | 156,225.00 | 124,149.86 | 124,688.40 | (538.54) | (538.54) | 0.00 |
| MSCA02-24 | K3K4/KNK4/KPK4 | 165,091.00 | 12,945.00 | 28,103.00 | 206,139.00 | 140,223.18 | 140,159.98 | 63.20 | 63.20 | 0.00 |
| MSCA02-25 | K395/KN95/KP95 | 157,952.00 | 14,530.00 | 31,958.00 | 204,440.00 | 168,205.38 | 164,266.17 | 3,939.21 | 3,939.21 | 0.00 |
| MSCA02-26 | | 0.00 | | | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MSCA02-27 | K396/KN96/KP96 | 206,905.00 | 10,063.00 | 21,984.00 | 238,952.00 | 192,167.67 | 191,904.97 | 262.70 | 262.70 | 0.00 |
| MSCA02-28 | K397/KN97/KP97 | 38,408.00 | 8,770.00 | 16,371.00 | 63,549.00 | 37,677.01 | 37,634.05 | 42.96 | 42.96 | 0.00 |
| MSCA02-29 | KN98/KP98 | 431,680.00 | | 169,790.00 | 601,470.00 | 492,864.04 | 495,277.35 | (2,413.31) | (2,413.31) | 0.00 |
| MSCA02-31 | K3F8/KNF8/KPF8 | 38,591.00 | 5,305.00 | 9,168.00 | 53,064.00 | 11,114.48 | 11,160.33 | (45.85) | (45.85) | 0.00 |
| MSCA02-32 | K3J9/KNJ9/KPJ9 | 164,154.00 | 11,030.00 | 18,150.00 | 193,334.00 | 143,323.13 | 142,740.50 | 582.63 | 582.63 | 0.00 |
| MSCA02-33 | KNJ1/KPJ1 | 277,412.00 | | 116,753.00 | 394,165.00 | 272,712.54 | 275,878.30 | (3,165.76) | (3,165.76) | 0.00 |
| MSCA02-34 | KPR3 | 27,997.00 | | 15,405.00 | 43,402.00 | 40,132.33 | 41,245.68 | (1,113.35) | (1,113.35) | 0.00 |
| MSCA02-35 | KP47 | 8,078.00 | | 33,745.00 | 41,823.00 | 35,726.15 | 36,208.70 | (482.55) | (482.55) | 0.00 |
| MSCA02-36 | KNM6/KPM6 | | 206,989.00 | 49,369.00 | 256,358.00 | 8,353.58 | 8,617.04 | (263.46) | (263.46) | 0.00 |
| | | 4,612,109.00 | 399,240.00 | 1,277,507.00 | 6,288,856.00 | 4,978,477.34 | 4,848,072.06 | 130,405.28 | 11,607.77 | 118,797.51 |
| | | | | SITE 64 | 1,213,951.00 | | | | | |
| | | | | | 7,502,807.00 | | | | | |
| | | | | IPA | 67,358.00 | | | | | |
| | | | | TOTAL | 7,570,165.00 | | | | | |

Task E2 - Site Oversight (cont.)

responsible for remediating subunit 2, and both NSC and AMD are responsible for remediating subunit 3 (the co-mingled area downgradient of both NSC and AMD). NSC is continuing to implement the cleanup plan specified in the ROD adopted in September 1991. Soil is being remediated utilizing soil vapor extraction. Groundwater is being remediated via groundwater extraction and treatment.

During the last quarter, 29 groundwater extraction wells were in operation within subunits 1, and 3 groundwater extraction wells and a large dewatering system were in operation in subunit 3. A number of others extraction wells were out of service because of low water levels. The total volume of groundwater extracted from subunits 1 and 3 (excluding the dewatering system) was nearly 29,000,000 gallons, averaging 224 gpm. The total VOC mass removed was 150 pounds. Three groundwater treatment systems are utilized to treat extracted groundwater, which is discharged under NPDES permit. Groundwater monitoring indicates that contaminant concentrations within the A and B1 aquifer have generally declined. SVE extraction at one source area has been shut down for system evaluation. SVE system design has been initiated at 9 other source areas.

During the next two quarters, NSC will complete design and installation of the SVE systems at 9 source areas. The second of NSC's two NPDES permits for discharging treated groundwater will be superseded by a new "general permit".

Advanced Micro Devices -- Arques Site: Advanced Micro Devices (AMD) is responsible for remediating subunit 2, and both NSC and AMD are responsible for remediating subunit 3 (the co-mingled area downgradient of both NSC and AMD). AMD is continuing to implement the cleanup plan specified in the ROD adopted in September 1991. Soil is being remediated utilizing soil vapor extraction. Groundwater is being remediated via groundwater extraction and treatment.

During the last quarter, 12 groundwater extraction wells were in operation within subunit 2. The total volume of groundwater extracted from subunits 2 was 4.2 million gallons, averaging 33 gpm. The total VOC mass removed was 14.5 pounds. An air stripper is utilized to treat extracted groundwater, which is discharged under NPDES permit. Groundwater monitoring indicates that contaminant concentrations within the A aquifer has generally declined; however, B aquifer concentrations appear to be increasing. SVE extraction at one source area has continued to operate, removing a total of 13.7 pounds during the quarter (significantly less than the previous quarter due to repairs). Extraction was initiated at an additional soil vapor extraction well).

Subunit 3 activities are described in the MSCA update for NSC.

During the next two quarters, AMD will submit a workplan proposing the collection of soil samples from areas currently under soil vapor extraction. AMD will continue to operate the soil and groundwater remediation systems.

RHONE-POULENC/SANDOZ, EAST PALO ALTO

Background: In order to expedite investigation and cleanup, the Site was divided into Upland and Wetland Operable Units in 1991. The RAP/ROD for the Upland Operable Unit was approved February 1992. The remedial action plan consisted of: removal of highest concentration soil (>5,000 mg/kg arsenic); treatment of soil containing between 500-5,000 mg/kg arsenic; capping of all soil with concentration of arsenic >70 mg/kg; deed restrictions of any property containing >70 mg/kg arsenic; slurry wall to contain groundwater; and, a groundwater contingency plan to prevent further migration of pollutants. In order to expedite remediation further, the Ecological Assessment was divided into Non-Tidal and Tidal Wetland Reports. Based on the Ecological Assessment report for the Non-tidal Wetland, Board staff amended the Upland OU RAP/ROD boundaries using an Explanation of Significant Difference which was adopted in March 1994. The revised draft Ecological Assessment for the Tidal Wetland was submitted to the agencies in June 1994. Upon approval of this document by the agencies, a Feasibility Study report and Proposed Plan shall be developed for the Wetland OU. A RAP/ROD for the Wetland OU may be completed during the summer of 1995.

Activities this quarter: During the last quarter implementation of the Upland OU remedy into the Upland OU Annex area began pursuant to the Explanation of Significant Difference amending the Upland OU RAP/ROD. Field work which included the insitu treatment of 11,000 yards of arsenic polluted soil with silicates was conducted throughout the summer. Upon completion in September of the treatment portion of the remedy, the site was prepared for winter.

Activities anticipated the next two quarters: Board staff will be meeting with adjacent property owners and Rhone-Poulenc to discuss cap designs for the Upland OU Annex area. The final capping of the properties is scheduled for the spring of 1995.

Board staff will meet with EPA, NOAA, USFW, and Rhone-Poulenc to discuss the Ecological Assessment of the Tidal Wetland and the Preliminary Wetland

PROGRAM ELEMENT B: SITE MANAGEMENT SYSTEM

Task Description

Under the earlier and current MSCA agreements the RWQCB implemented a computerized system to track RI (site remedial investigation), FS (feasibility studies / alternatives evaluation), and the implementation of remedial action activities for use of the RWQCB, Cal/EPA-DTSC and EPA management personnel for use in site enforcement and task tracking.

Additionally, as part of the community involvement program the SMS has been distributed to 15 municipal agencies, 9 libraries, 7 state and federal agency representatives, 2 environmental groups, and 1 manufacturers group, as well as sold (for reproduction costs) to those desiring it (primarily consultants).

Products

The Board has changed the SMS according to the revised workplan. The 1992-93 workplan supports a significantly reduced SMS effort, at least for the "paper" portion. Regional Board implemented this "new" SMS in early 1993 utilizing a computer Bulletin Board format with a computer purchased in December 1992 utilizing MSCA funds. The BBS portion went on-line March 18, 1993. The yearly updated paper edition was updated May 1994 with an as-of date of early 1994 and distributed to EPA, Cal/EPA-DTSC, and various governmental and public agencies and interest groups.

Continuing updates until the next annual paper update will be maintained for public and staff access on the BBS.

State Budgeted Activities

There is no existing State-funded budget or activities for the Site Management System.

Cost

Expenditures for Task B are included in the Program Costs Table on page 6.

PROGRAM ELEMENT D: COMMUNITY INVOLVEMENT

Task Description and Objectives

The main objectives of community involvement activities performed under the MSCA are:

Provide the general public with information on ground water systems, water supply sources, water quality, hazardous waste regulatory processes, and scope, progress and findings of remedial response activities.

Provide sufficient background information about technical and environmental issues to help the public understand and assess remedial actions.

Provide information, especially technical findings, in a form understandable to the general public.

Provide elected officials and the media with timely detailed information at key points throughout program activities.

Use the media as a major means of disseminating information to the general public.

Establish a two-way information exchange with environmental, public interest, and other concerned groups throughout the remedial response program.

Provide the means for all interested individuals to express concerns and make inquiries throughout project activities. (the opportunity for two-way communication is particularly important because of the length and complexity of the project).

Use the Groundwater Task Force, for overall coordination and review of community involvement efforts.

Create an interagency community involvement team to further coordinate the flow of information from agencies to the public.

Monitor public concerns and information needs

Modify the community involvement plan(s) to respond to changes in community attitudes and needs.

Community involvement activities conducted under the MSCA function independently, but coordinated with, EPA's area wide (but limited) community involvement strategy as well as DHS's site community involvement programs. Specifically, the RWQCB will be responsible for providing information and directing community involvement activities for RWQCB-lead sites.

Community Involvement activities are now significantly reduced as the IGA staff on-loan from EPA returned to EPA in October 1993 and all Community Involvement work will now be handled by Board staff. Losing the full-time staff is mitigated by the reduced workload with only several sites awaiting completion of RAP/RODs as well as significant planning to assure a satisfactory transition.

Products

Per earlier explanation, all Community Involvement activities are now combined into the project managers' tasks of site oversight.

Future Activities

Future activities are currently scheduled to meet the MSCA Special Conditions, especially for the sites awaiting final RAP/RODs.

Costs

All costs for Community Involvement are now included in the other tasks as part of the every day work. All Community Involvement work will now be performed by state employees. See the Table on page III-6 for overall grant budget status that includes Community Involvement costs by site.

PROGRAM ELEMENT E: TIER I ACTIVITIES

Tier I activities are those activities that occur at specific sites in the South Bay.

| | | | |
|------------|--|----------|---------------------------------------|
| TASK E1.* | IDENTIFICATION OF NEW SITES | TASK E2. | RWQCB OVERSIGHT OF NPL PRP ACTIVITIES |
| TASK E1a.* | SCREENING OF NEW SITES IN ORDER TO CONDUCT PAS ON MOST SENSITIVE SITES | | |
| TASK E1b.* | OVERSIGHT OF PRP SI | | |

*Note: These tasks were not requested for funding in this Phase; they may be considered at a later time if conditions change.

TASK E2. RWQCB OVERSIGHT OF NPL PRP ACTIVITIES

Regional Board activities in this task cover the RI/FS oversight RD/RA and/or regulation underway at the 30 South Bay MSCA Superfund sites (31 companies/agencies either final and proposed including Liquid Gold and United Heckathorn in Richmond) for which the Board as a regulatory agency has either the current lead (21) or the supporting agency role (9). The current Agency-Lead and NPL Status as of this report are covered below.

EPA Lead Superfund Sites:

- *1. Fairchild Semiconductor Corp.,
464 Ellis St., Mountain View
- *2. Intel Corp., 365 E. Middlefield Rd.,
Mountain View
3. Jasco Chemical Company, 1710 Villa St.,
Mountain View
4. Lorentz Barrel and Drum, 1515 S. 10th St.,
San Jose
Moffett Naval Air Station, Sunnyvale
(no longer part of South Bay MSCA)
- *5. Raytheon Company, 350 Ellis St.,
Mountain View
6. United Heckathorn, Richmond
7. Westinghouse Electric Corporation, 401 E.
Hendy Ave., Sunnyvale

RWQCB Lead Superfund Sites:

- *1. Advanced Micro Devices, 901 Thompson
Pl, Bldg.901, Sunnyvale
2. Advanced Micro Devices, Bldg. 915., 915
Deguigne Dr., Sunnyvale
- *3. AMD-Arques, (formerly Monolithic
Memories, Inc.), 1165 East Arques Ave.,
Sunnyvale
4. Applied Materials, 3050 Bowers Avenue,
Santa Clara
5. CTS Printex, 1905-1931 Plymouth St.,
Mountain View
6. Fairchild Camera and Instrument Corp.,
Bernal Road, San Jose
7. Hewlett-Packard, 640 Page Mill Rd., Palo
Alto
8. Hewlett-Packard, 1501 Page Mill Rd., Palo
Alto
Hexcel, Livermore
(no longer part of South Bay MSCA)
9. Intel Facility III, 2880 Northwestern
Parkway, Santa Clara
10. Intel Magnetics/MicroStorage, 3000
Oakmead Village Dr., Santa Clara
11. International Business Machines, Cottle
Road, San Jose

- *12. Intersil, Inc., and Siemens Components,
Inc., Cupertino
- *13. National Semiconductor, 2900
Semiconductor Dr., Santa Clara
14. Rhône-Poulenc/Sandoz, 1990 Bay Road,
East Palo Alto
- *15. Signetics, 811 E. Arques, Sunnyvale
16. Solvent Services, 1022 Berreyessa Road,
San Jose
- *17. Spectra-Physics, Inc., 1250 West
Middlefield Road, Mountain View
18. Synertek #1, Santa Clara
- *19. Teledyne Semiconductor, 1300 Terra Bella
Ave., Mountain View
- *20. TRW Inc., 825 Stewart Pl., Sunnyvale
21. Van Waters & Rogers, Inc., 2256 Junction
Ave., San Jose

* above sites will be treated as part of a combined site, at least for off-site work.

Cal/EPA-DTSC Lead Superfund Sites:

1. Liquid Gold, Richmond

EPA NPL Modifications (RCRA "drop" sites):

EPA's proposed rule-making in June 1988, (NPL Update #7) recommended that 6 NPL sites be deleted from the NPL since they are RCRA sites. Two other RCRA sites were proposed to be retained on the NPL. RWQCB officially commented to EPA-HQ on this proposal to delete high-priority RCRA sites by questioning the timeliness of the RCRA regulation update, future MSCA funding for these CERCLA/RCRA sites, and the lack of Technical Assistance Grants to citizen groups for RCRA (only) sites. EPA-IX has stated that the RCRA sites (proposed deleted and those remaining) will be treated as NPL sites to assure attention to cleanup appropriate to their NCP HRS scoring.

On October 4, 1989, EPA announced its final rule on the dropping of some of the NPL sites that are also RCRA sites. Under this rule, the following sites have been dropped from the NPL:

Hewlett-Packard, 1501 Page Mill Road
IBM, San Jose
Rhône Poulenc/Sandoz, East Palo Alto
Signetics, Sunnyvale
Van Waters and Rogers, San Jose

EPA and the Board, per policy, continue to treat the RCRA "drop" sites the same as NPL sites in terms of requirements, tasks, and cleanup. Due

Task E2 - Site Oversight (cont.)

to staffing constraints, the RWQCB's final Site Cleanup Order adopting the RI/FS and RAP will be the last regulatory action. Review and comment on the RWQCB's SCO by EPA-IX will suffice for approval unless the EPA is in disagreement with the RWQCB's actions.

Products during Reporting Period:

Regional Board actions / Orders affecting the South Bay MSCA:

July:

August:

September:

South Bay MSCA Superfund Site Cleanup Decisions (Remedial Investigations/Feasibility Studies/Remedial Action Plan): All the South Bay Superfund sites have performed significant amounts of work to meet Superfund final cleanup decision requirements. The tasks remaining are necessary to meet State and Federal Superfund (almost all of which the State requires as well) requirements to determine the best alternative cleanup plan considering protection of public health and the environment as well as the maintenance (i.e. high quality groundwater) and protection of the resource (i.e. water conservation and reclamation).

Board staff conducted the following tasks as detailed in the EPA OSWER Memorandum dated October 1, 1986, entitled, "CERCLA Funding of Oversight of Potentially Responsible Parties by States at National Priority List Sites."

Review Tasks (all sites):

- Reviewed and commented on scope of work and work plans (all work plans requested and approved as of August 1990; updating due to operable units still may be necessary)
- Reviewed and commented on updates to Safety Plans
- Reviewed and Commented on drafts of portions of RI reports (all)
- Reviewed/discussed FS objectives
- Completed PRP reports (all)
- Organized and participated in technical meetings on the RI/FS with PRPs, PRP contractors, and/or EPA. (all)
- Provided Technical Support to the Community Relations Task for:

Briefing of local and state officials

Prepared fact sheets and press releases

Field Related Tasks:

- On-site presence/inspection as necessary (all)

In addition, at RWQCB lead sites the following tasks were in progress by RWQCB staff or contracted by the RWQCB:

- Data Validation (all by IAG with DHS)
- Public Health Baseline Evaluation
(all work other than by PRP is by EPA or by contract award to ICF/Clement for both BPHE, BPHE review, and RI/FS review)
- Maintenance of the Administrative Record
(primary use of PRPs for initial preparation)
- Continue Implementation of Cost Recovery
(all)

For those sites where the RWQCB is the Support Agency, staff provided support in the tasks described above to the extent necessary but not to exceed the staffing levels previously approved (exceptions are noted in the Board's letter and memorandums of February 9, and May 3, 1993, respectively, requesting budget redirections and reductions for final FFY 93 award). Sites primarily affected: MEW, Lorentz, United Heckathorn, Westinghouse, JASCO, Liquid Gold.

For those sites under Regional Board lead, the IBM, Fairchild San Jose, Applied Materials, Intel SCIII, Intersil/Siemens, Solvent Services, AMD 901/902, AMD 915, AMD Arques, CTS Printex, National Semiconductor OU#1, Microstorage/Intel Magnetics, Signetics, Rhône-Poulenc/Sandoz (Uplands OU), TRW/FEI Microwave, Teledyne, Spectra-Physics, Synertek #1, Van Waters & Rogers, and Hexcel (now delisted), sites have completed the RI/FS and RAP and a ROD have been signed in this MSCA grant phase (See Table, Page III-5).

Costs and Budgets: Even with the addition of the latest grant awards and the budget redirection among sites, some **site specific** over-and under-expenditures are occurring. While no new grant funds were required, proposed redirection among sites in the July 30, 1993, award have been made, and it now appears that further redirection will be necessary late CY 1994.

Task E2 - Site Oversight (cont.)

The following is a description of the MSCA funded staff work and the current status at each of the MSCA Superfund sites.

REGIONAL BOARD LEAD SUPERFUND SITES:

ADVANCED MICRO DEVICES 901-902, SIGNETICS, TRW (FEI) MICROWAVE (THE COMPANIES)

The Final Remedial Action Plan (RAP) for the combined site(s) was adopted by the Board in June 1991.

Advanced Micro Devices (AMD), is continuing to implement the site cleanup plan specified in the ROD adopted in September 1991. The ROD also specified cleanup plans for the TRW site located at 825 Stewart Drive, and the Phillips Semiconductors (formerly Signetics) site located at 811 East Arques Avenue. All three parties are also required to remediate an area of commingling, referred to as the Off-Site Operable Unit. Site remediation at the AMD site consists of extraction and treatment of groundwater, and excavation of approximately 37 cubic yards of residual soil contamination.

During the last quarter, groundwater extraction continued at 8 on-site extraction wells. The total volume of groundwater extracted during the quarter was 2.7 million gallons, averaging 31 gpm. A total of 7.7 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit. No soil remediation has taken place during the 3rd quarter of 1994.

During the next two quarters, AMD will continue groundwater extraction and treatment.

TRW Microwave is continuing to implement the site cleanup plan specified in the ROD adopted in September 1991. The ROD also specified cleanup plans for the Phillips Semiconductors located at 811 Stewart Drive, and the Advanced Micro Devices sites located at 901 and 902 DeGuigne Drive. All three parties are also required to remediate an area of commingling, referred to as the Off-Site Operable Unit. Site remediation at the TRW site consists of extraction and treatment of groundwater and soil vapor extraction. Because residual soil contamination at the site is minimal and at depths below the groundwater table, no further soil remediation has been required.

During the last quarter, groundwater extraction continued at 7 groundwater extraction wells and an eductor pit. Groundwater was extracted at approximately 16.5 gallons per minute, and the total volume extracted during the quarter was 2.5 million gallons. A total of approximately 155 pounds of VOCs

were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit. Although no further soil remediation has been required, TRW operates a soil vapor extraction system adjacent the eductor pit to enhance groundwater remediation. During the second quarter, the SVE system removed a total of 8 pounds of VOCs. Ten soil vapor monitoring points were installed to measure the vacuum influence during the third quarter 1994. Groundwater monitoring generally shows a continued decline in groundwater contamination levels.

During the next two quarters, TRW will continue groundwater and soil vapor extraction and treatment. TRW is also planning to install three additional soil vapor extraction points.

Phillips Semiconductors (formerly Signetics) is continuing to implement the site cleanup plan specified in the ROD adopted in September 1991. The ROD also specified cleanup plans for the TRW site located at 825 Stewart Drive, and the Advanced Micro Devices sites located at 901 and 902 DeGuigne Drive. All three parties are also required to remediate an area of commingling, referred to as the Off-Site Operable Unit. Site remediation at the Phillips Semiconductors site consists of extraction and treatment of groundwater and soil vapor extraction.

During the last quarter, groundwater extraction continued at groundwater extraction wells, extraction trenches, basement dewatering systems. The total volume of groundwater extracted during the quarter was 12.4 million gallons. A total of approximately 400 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit. The soil vapor extraction system removed a total of 6.5 pounds of VOCs. The cumulative mass of VOCs removed since October 1988 was 731 pounds.

During the next two quarters, Phillips will continue groundwater extraction and treatment. In addition, Phillips will submit a proposal to operate the soil vapor extraction system on a pulse pumping schedule. On 11/16/94, the Regional Board reissued the existing NPDES permit for the groundwater pump and treat system.

TRW, Phillips, and AMD are continuing to implement the site cleanup plan specified in the ROD adopted in September 1991. The ROD defines the Off-Site

Task E2 - Site Oversight (cont.)

Operable Unit as the area north of the TRW/AMD/Phillips sites, which appears to be impacted by all three sites. Remediation at the Off-Site Operable Unit consists of two groundwater extraction systems, one located along Alvarado Avenue, the other at along Duane Avenue.

During the last quarter, groundwater extraction continued at the Alvarado and Duane Avenue extraction systems. Groundwater was extracted at rates ranging from approximately 0.1 gpm to 18 gpm. The total volume extracted during the quarter was 19 million gallons. A total of 120 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing air strippers, and discharged under NPDES permit. Staff also met with TRW, AMD, and Phillips to discuss the effectiveness of the remedial effort and long term cleanup goals.

During the next two quarters, the companies will continue groundwater extraction and treatment.

ADVANCED MICRO DEVICES, BUILDING 915, 915 DEGUIGNE DRIVE, SUNNYVALE, SANTA CLARA COUNTY

Advanced Micro Devices (AMD), is continuing to implement the site cleanup plan specified in the ROD adopted in August 1991. Groundwater is being remediated via groundwater extraction and treatment. All contaminated soil has been removed from the site.

During the last quarter, groundwater extraction continued at 7 on-site extraction wells. The total volume of groundwater extracted during the quarter was 6.3 million gallons, averaging 47 gpm. A total of 31 pounds of VOCs were removed from the groundwater. Extracted water is treated utilizing an air stripper, and discharged under NPDES permit. The groundwater contamination plume appears to be contained beneath the site, and appears to be impacted from upgradient sources.

During the next two quarters, AMD will continue groundwater extraction and treatment.

APPLIED MATERIALS, INC. BUILDING 1, 3050 BOWERS AVENUE, SANTA CLARA

The final Remedial Action Plan (RAP) for the Building 1 site was adopted by the Board in September, 1990. A ROD for a groundwater Operable Unit was adopted 9/28/90; a Final ROD was adopted 8/25/93. A Superfund Preliminary Close Out Report was issued 9/27/93. The Cleanup Plan for this site includes only groundwater extraction and treatment by air stripping.

Activities this quarter: Operation of the groundwater extraction and treatment systems continued with no NPDES violations. Under the new schedule proposed by the Discharger and accepted by Staff, the reporting frequency for Self-Monitoring Reports is now semi-annually; the next report, called the Annual Report, will be submitted in March, 1995. The NPDES reports which had been submitted monthly are now submitted quarterly; the current report was received November 14, 1994, and the next one will be submitted in February, 1995. The current report shows that about 0.79 kg (approximately 1.8 pounds) of VOCs was removed by groundwater extraction during the period July-October, 1994. The 5-year status report was submitted October 1, 1994, as required by Board Order. A preliminary review indicated incomplete reporting of certain elements; a report addendum is due by the end of this month. The status report includes a proposal to categorize this site as a Non-Attainment Area.

Projected events for next two quarter: Staff expects to complete the review of the 5-year status report and provide comments. The annual site inspection is scheduled for December, 1994.

There appear to be two pending issues which will be addressed next two quarters. These are: (1) AM's proposal to categorize the site as a Non-Attainment Area, and (2) the presence or absence of DNAPL on this site.

CTS PRINTEX, 1905, 1911, 1921, AND 1931 PLYMOUTH STREET, MOUNTAIN VIEW

The Final RAP was approved on May 15, 1991 under Site Cleanup Order No. 91-081. The cleanup plan consists of extraction and treatment of groundwater until cleanup standards are met, and long term monitoring.

During the last quarter, CTS extracted 300,000 gallons of water and discharged this waste to the POTW. Plume contours developed from monitoring data seem to indicate that a probable offsite source was contributing to CTS's plume. CTS is concerned that they may be drawing in pollution from other sites into their extraction network and is considering reducing its extraction rates to minimize any commingling with other plumes. Board staff inspected the facility on October 19, 1994 and visited other offsite sources.

During the next six months, CTS will continue groundwater monitoring and extraction. Board staff, along with the Santa Clara Valley Water District, will continue investigations of upgradient sources.

Task E2 - Site Oversight (cont.)

FAIRCHILD, SAN JOSE

The final Remedial Action Plan (RAP) was adopted by the Regional Board in January 1989 and amended in May 1990. It included continued groundwater extraction (on and off-site) and SVE for dewatered zones within the on-site slurry wall. The RAP set cleanup standards for on-site groundwaters at MCLs and for off-site groundwaters at less than one fourth the MCLs.

Board staff approved a temporary shut-down of the off-site extraction wells in December 1991. Computer modeling shows that groundwater pumping is ineffective in speeding up remediation of the aquifers at this site; the model predicts that off-site cleanup will take 15 years, whether or not off-site pumping occurs.

During the last quarter, Fairchild operated the on-site extraction system continuously at a rate of about 70 gpm, discharging the treated groundwater to the storm drain. Total discharge volume for the quarter was about 9 million gallons. The Regional Board reissued the NPDES permit for this discharge on 9/21/94.

The off-site extraction wells were shut down as part of the approved demonstration project. The no-pumping program will continue for the next five years, provided the off-site plume remains stable. During this quarter, VOC concentrations did not increase or migrate, consistent with modelling results and prior sampling results.

During the next six months, Fairchild will continue on-site groundwater extraction. Fairchild will seal 33 wells, consistent with RWQCB staff's 10/6/94 conditional approval. Fairchild will conduct post-remediation soil borings to document SVE effectiveness, consistent with RWQCB staff's 10/18/94 conditional approval.

HEWLETT-PACKARD, 640 PAGE MILL ROAD, PALO ALTO

Background: Hewlett-Packard's 640 Page Mill Road site (HP 640) is part of the California, Olive and Emerson Streets (COE) study area, which also includes sites at 395 Page Mill Road (HP 395) and 601 California Street (Varian 601). Groundwater extraction and treatment systems have been operating at HP 640 and Varian 601 for several years, and recently commenced in a portion of the off-site area. An SVE system operates at the Varian 601 site. The Santa Clara County Transportation Agency operates an underpass dewatering system that provides significant capture of the off-site contaminant plume. Extracted/treated groundwater is discharged to the sanitary sewer.

Last quarter: Interim remediation activities continued, with 7 million gallons extracted and treated. The

companies finished installing conveyance piping under El Camino Real, a key feature of the off-site remediation system, and started up 8 off-site extraction wells. The Regional Board adopted final Site Cleanup Requirements for the COE study area, including HP 640, on 9/21/94, following distribution of a fact sheet, community meeting, and 30-day period to comment on the proposed cleanup plan. The final SCR calls for expansion of the existing groundwater extraction systems, with 4 additional extraction wells.

Next two quarters: The companies will continue interim remediation activities. EPA staff will issue the Record of Decision (ROD) by 12/94. The final Site Cleanup Requirements, which are part of the Remedial Action Plan, will be used to write the ROD. To comply with tasks in the final Site Cleanup Requirements, the companies will submit proposed institutional constraints and a workplan for additional off-site extraction wells in 12/94.

HEWLETT-PACKARD, 1501 PAGE MILL ROAD, PALO ALTO

Background: Hewlett-Packard has operated interim remediation systems, including SVE and groundwater extraction/treatment, at this site for several years. Extracted/treated groundwater is discharged to the sanitary sewer.

Last quarter: Interim remedial actions continued, with 0.6 million gallons extracted and treated. The Regional Board adopted final Site Cleanup Requirements for the site on 8/17/94, following distribution of a fact sheet, a 6/21/94 community meeting, and 30-day period to comment on the proposed cleanup plan. Because this is a RCRA-drop site, a Record of Decision (ROD) is not needed. The final SCR calls for expansion of the existing SVE and groundwater extraction systems, with 3 additional SVE wells and 21 additional groundwater extraction wells.

Next two quarters: Hewlett-Packard will continue interim remediation activities. To comply with tasks in the final Site Cleanup Requirements, Hewlett-Packard will install additional SVE wells and submit proposed institutional constraints and a workplan for additional groundwater extraction wells in 12/94.

HEXCEL CORPORATION, LIVERMORE, ALAMEDA COUNTY

No longer part of MSCA

INTEL, SANTA CLARA III, Santa Clara

The Final RAP for the site was adopted by the Board in July 1990. The cleanup plan for this site consists of groundwater extraction and treatment by carbon

Task E2 - Site Oversight (cont.)

adsorption. Intel submitted a report titled "Cyclic Pumping Demonstration Project, Evaluation and Evaluation Recommendations for Further Actions" in late 1991. Cyclic pumping (also known as pulsed pumping) is believed to be a method for improving groundwater remediation efficiencies.

Based on this October 1991 report, Intel has tried both 60-day on/60-day off and 120-day on/120-day off pumping cycles. Intel has submitted effectiveness reports on these cycles that conclude that these pumping cycles are no more efficient than continuous pumping. In response to requests by Board staff, Intel proposed a new demonstration project involving various cyclic pumping schemes that began on January 15, 1993. These additional pumping trials did not show any significant improvement over the previous trials or continuous pumping. After meeting with Intel to discuss the latest cyclic pumping results, Board staff has approved Intel's request for a twelve month trial period with all pumps off. During this trial, monitoring wells will be sampled quarterly to determine if there is any plume migration or concentration changes. Intel has submitted a petition requesting that the Board change the point of compliance with the site's groundwater cleanup standards from all areas of the site, to the property boundary of the site. Intel claims that groundwater cleanup standards are not likely to be met onsite using available technology and that groundwater extraction is no longer providing significant reduction of groundwater contamination. Intel believes that remaining contamination will not migrate from the site and that the site can be managed such that there is minimal risk from the remaining contaminants in the groundwater. Board Staff has reviewed the petition and have solicited USEPA's position on this issue.

Activities this quarter: The groundwater extraction system was not operating due to the ongoing twelve month trial period during which the extraction system was shut down.

Projected events for the next two quarters: Board staff will review the results of the twelve month pumps off trial period. The five year review for this site is scheduled to occur in 1995. USEPA has indicated that they will consider Intel's petition to have the point of compliance with the site's groundwater cleanup standards changed to the property boundaries of the site, during the five year review process.

INTERNATIONAL BUSINESS MACHINES, SAN JOSE

The final Remedial Action Plan (RAP) was adopted by the Regional Board in October 1988. It set cleanup standards similar to those for Fairchild (San Jose) and

included soil vapor extraction (on-site) and continued groundwater extraction (on and off-site).

During the last quarter, IBM extracted and treated about 87 million gallons of groundwater, reusing about 68 million gallons (or 78%) of this total volume. All on-site extracted groundwater was reused, by reinjection, landscape irrigation, or as feed water for industrial use. Most off-site groundwater was discharged to Canoas Creek. The soil vapor extraction system continued to be effective, removing about 1,400 pounds of VOCs and hydrocarbons from on-site soils during the quarter. The off-site groundwater plume remained stable.

During the next six months, IBM will continue its cleanup program. IBM will close one private, off-site well (Magic Sands MHP) to eliminate a potential vertical conduit, and will plan for closure of another such well (Town and Country MHP). Efforts to reuse off-site extracted groundwater will be postponed, pending a determination of the optimal pumping rate. The Board reissued IBM's NPDES permit on 10/19/94.

MICRO STORAGE/INTEL MAGNETICS, SANTA CLARA

The Final Remedial Action Plan (RAP) for the site was adopted by the Board in July 1991. The Record of Decision (ROD) was signed in August 1991. The cleanup plan for this site includes groundwater extraction and treatment by carbon adsorption.

Activities this quarter: During the last quarter, operation of the groundwater extraction and treatment system continued with no NPDES violations. Approximately 1,094,374 gallons of groundwater were extracted, treated, and discharged into the storm drain.

Projected events for the next two quarters: The Board adopted an amendment to the final RAP in November 1993 naming International Diagnostic Technologies (IDT) and Boehringer Ingelheim (BI) as additional primary responsible parties. BI has appealed the amendment to the State Board. Board staff expects to receive the State Board's decision on the appeal sometime during the next two quarters.

NATIONAL SEMICONDUCTOR CORPORATION & ADVANCED MICRO DEVICES (1165 ARQUES, FORMERLY MONOLITHIC MEMORIES), SUNNYVALE / SANTA CLARA

National Semiconductor Corporation (NSC), along with Advanced Micro Devices (AMD) is one of two dischargers located within an area in eastern Sunnyvale/western Santa Clara, designated as Operable Unit 1. OU1 has been subdivided into 3 subunits. NSC is responsible for remediating subunit 1, AMD is

Task E2 - Site Oversight (cont.)

responsible for remediating subunit 2, and both NSC and AMD are responsible for remediating subunit 3 (the co-mingled area downgradient of both NSC and AMD). NSC is continuing to implement the cleanup plan specified in the ROD adopted in September 1991. Soil is being remediated utilizing soil vapor extraction. Groundwater is being remediated via groundwater extraction and treatment.

During the last quarter, 29 groundwater extraction wells were in operation within subunits 1, and 3 groundwater extraction wells and a large dewatering system were in operation in subunit 3. A number of others extraction wells were out of service because of low water levels. The total volume of groundwater extracted from subunits 1 and 3 (excluding the dewatering system) was nearly 29,000,000 gallons, averaging 224 gpm. The total VOC mass removed was 150 pounds. Three groundwater treatment systems are utilized to treat extracted groundwater, which is discharged under NPDES permit. Groundwater monitoring indicates that contaminant concentrations within the A and B1 aquifer have generally declined. SVE extraction at one source area has been shut down for system evaluation. SVE system design has been initiated at 9 other source areas.

During the next two quarters, NSC will complete design and installation of the SVE systems at 9 source areas. The second of NSC's two NPDES permits for discharging treated groundwater will be superseded by a new "general permit".

Advanced Micro Devices -- Arques Site: Advanced Micro Devices (AMD) is responsible for remediating subunit 2, and both NSC and AMD are responsible for remediating subunit 3 (the co-mingled area downgradient of both NSC and AMD). AMD is continuing to implement the cleanup plan specified in the ROD adopted in September 1991. Soil is being remediated utilizing soil vapor extraction. Groundwater is being remediated via groundwater extraction and treatment.

During the last quarter, 12 groundwater extraction wells were in operation within subunit 2. The total volume of groundwater extracted from subunits 2 was 4.2 million gallons, averaging 33 gpm. The total VOC mass removed was 14.5 pounds. An air stripper is utilized to treat extracted groundwater, which is discharged under NPDES permit. Groundwater monitoring indicates that contaminant concentrations within the A aquifer has generally declined; however, B aquifer concentrations appear to be increasing. SVE extraction at one source area has continued to operate, removing a total of 13.7 pounds during the quarter (significantly less than the previous quarter due to repairs). Extraction was initiated at an additional soil vapor extraction well).

Subunit 3 activities are described in the MSCA update for NSC.

During the next two quarters, AMD will submit a workplan proposing the collection of soil samples from areas currently under soil vapor extraction. AMD will continue to operate the soil and groundwater remediation systems.

RHONE-POULENC/SANDOZ, EAST PALO ALTO

Background: In order to expedite investigation and cleanup, the Site was divided into Upland and Wetland Operable Units in 1991. The RAP/ROD for the Upland Operable Unit was approved February 1992. The remedial action plan consisted of: removal of highest concentration soil (>5,000 mg/kg arsenic); treatment of soil containing between 500-5,000 mg/kg arsenic; capping of all soil with concentration of arsenic >70 mg/kg; deed restrictions of any property containing >70 mg/kg arsenic; slurry wall to contain groundwater; and, a groundwater contingency plan to prevent further migration of pollutants. In order to expedite remediation further, the Ecological Assessment was divided into Non-Tidal and Tidal Wetland Reports. Based on the Ecological Assessment report for the Non-tidal Wetland, Board staff amended the Upland OU RAP/ROD boundaries using an Explanation of Significant Difference which was adopted in March 1994. The revised draft Ecological Assessment for the Tidal Wetland was submitted to the agencies in June 1994. Upon approval of this document by the agencies, a Feasibility Study report and Proposed Plan shall be developed for the Wetland OU. A RAP/ROD for the Wetland OU may be completed during the summer of 1995.

Activities this quarter: During the last quarter implementation of the Upland OU remedy into the Upland OU Annex area began pursuant to the Explanation of Significant Difference amending the Upland OU RAP/ROD. Field work which included the insitu treatment of 11,000 yards of arsenic polluted soil with silicates was conducted throughout the summer. Upon completion in September of the treatment portion of the remedy, the site was prepared for winter.

Activities anticipated the next two quarters: Board staff will be meeting with adjacent property owners and Rhone-Poulenc to discuss cap designs for the Upland OU Annex area. The final capping of the properties is scheduled for the spring of 1995.

Board staff will meet with EPA, NOAA, USFW, and Rhone-Poulenc to discuss the Ecological Assessment of the Tidal Wetland and the Preliminary Wetland

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Delineation of the Cooley Landing Salt Pond. Final comments on the Ecological Assessment are expected to be submitted by the agencies by December 1, 1994. A second meeting will be held in early December to discuss agency comments and to outline the Ecological Risk Assessment. The Ecological Risk Assessment will take about 3 months to complete and submit to the agencies. The Ecological Risk Assessment will then be used to develop a FS for the Wetland OU.

Work on finding an appropriate site and development of a wetland mitigation plan for the loss of wetlands destroyed during the implementation of the Upland OU Annex area RAP will continue. Should the schedule for the Wetland OU FS/RAP/ROD be accelerated, it may be possible to develop a comprehensive mitigation plan for the Upland OU Annex area and the Wetland OU together. Board staff estimate that a RAP/ROD for the Wetland OU may be completed during summer 1995.

SIEMENS COMPONENTS INC., 19000 HOMESTEAD ROAD, CUPERTINO; INTERSIL INC., 10900 N. TANTAU ROAD, CUPERTINO

Background: The Regional Board adopted final Site Cleanup Requirements (SCR) for these two adjacent Superfund sites in August 1990, and EPA issued a concurring ROD. The final SCR required additional groundwater extraction wells and soil vapor extraction wells. All work needed to implement the final SCR has been completed. Intersil has 7 groundwater extraction wells (an SVE system was successfully operated and has been removed). Siemens has 10 soil vapor wells and 18 groundwater extraction wells. The two companies jointly operate 3 extraction wells.

In April 1992, Siemens/Intersil requested permission to close four deep-aquifer monitoring wells off-site, in order to avoid possible damage due to construction activities. Board staff approved the request on June 4, 1992, given that no VOCs were detected in these wells. Shortly afterward, the City of Santa Clara reported PCE concentrations slightly over drinking water standards in a down-gradient public well. Continued monitoring confirmed the presence of PCE, but PCE has not been detected for about a year now. The source is not believed to be Siemens/Intersil. The four deep-aquifer monitoring wells are still in existence; the Santa Clara Valley Water District has taken ownership and responsibility of these wells.

Last quarter: Siemens/Intersil continued implementing the approved cleanup plan, extracting and treating 22 million gallons of groundwater and removing 50 pounds of VOCs (on-site and off-site). Both dischargers are concerned about remedial activities at the adjacent AMI site. AMI operates an on-site groundwater extraction

system, and recently started up an off-site groundwater extraction system. Siemens/Intersil are concerned that AMI is not capturing its groundwater plume, and that the plumes will eventually commingle. They would like the Board to adopt site cleanup requirements for AMI.

Next two quarters: The dischargers will continue remediation activities. Regional Board staff will prepare draft Site Cleanup Requirements for AMI in 1995, if possible by 3/95.

SOLVENT SERVICE INC. (SSI), 1021 BERRYESSA ROAD, SAN JOSE, SANTA CLARA COUNTY

The Final Remedial Action Plan (RAP) for the site was adopted by the Board in August 1990. A ROD for this site was adopted 9/27/90. The site was removed from the NPL circa 8/90 and is now a RCRA "drop" site. The Cleanup Plan includes groundwater extraction/treatment and soil vapor extraction/treatment, and capping of the entire site. Steam-enhanced vacuum extraction has been discontinued because engineering evaluation showed that SVE was just as effective as SIVE and was less costly. Groundwater and vapor are treated by bio-treatment, carbon filtering and air stripping.

Activities this quarter: During the last quarter operation of the groundwater extraction and treatment systems continued throughout the quarter with no reported violations. The steam enhanced vapor extraction system (SIVE) is no longer in operation; soil vapor extraction (SVE) has proved to be just as effective as SIVE and not as expensive to operate. During the last quarter 2.80 pounds of VOCs were removed by groundwater extraction, and 909 pounds by SVE. A total of about five million gallons of groundwater have been extracted from June, 1985 to the present. Staff visited the site in October. Surfacing of the entire site area is almost complete. Construction of the office building on-site is almost complete.

Projected events for next two quarters: The periodic Self-Monitoring Reports will be submitted. A proposal addressing off-site migration of VOCs may be submitted before the end of the year.

SYNERTEK #1, SANTA CLARA

The Final RAP for the site was adopted by the Board in March 1991. The cleanup plan includes groundwater extraction and treatment by air stripping.

Activities this quarter: During the last quarter the efficiency of operation of the groundwater extraction system was considerably reduced during the first two months of the quarter due to mineral deposits accumulating in the piping system. The clogged pipes were replaced and the extraction system is again operating normally. During the third quarter 437,169

Task E2 - Site Oversight (cont.)

gallons of groundwater were extracted and 0.56 pounds of VOCs were removed. There were no NPDES violations.

Projected events for the next two quarters: Routine review of self monitoring reports.

TELEDYNE SEMICONDUCTOR, 1300 TERRA BELLA AVE., MOUNTAIN VIEW; SPECTRA-PHYSICS INC., 1250 WEST MIDDLEFIELD ROAD, MOUNTAIN VIEW

Background: The Regional Board adopted final Site Cleanup Requirements for these two adjacent Superfund sites in February of 1991, and EPA issued a Record of Decision. The approved cleanup plan requires SVE at the Spectra-Physics facility and groundwater extraction off-site and at the Teledyne facility. The off-site area includes the North Bayshore area, which contains several additional sources of VOC contamination.

Teledyne sold Teledyne Components (formerly Teledyne Semiconductors) located at 1300 Terra Bella to TELCOM Semiconductors, Inc. in 1993. Teledyne continues to own the property and the building which was previously occupied by Teledyne Components and is now leased to TELCOM.

Teledyne and Spectra-Physics have requested amendment of the final SCR to require greater participation by North Bayshore VOC sources. The Regional Board considered this issue at its March 1993 and May 1993 meetings, and directed staff to amend the 1991 SCR to include a non-binding allocation of responsibility (NBAR).

Last quarter: Teledyne and Spectra-Physics continued implementing the approved cleanup plan, extracting and treating 27 million gallons of groundwater and removing 110 pounds of VOCs (on-site and off-site). Spectra-Physics proposed a workplan to conduct additional soil investigation as a result of its two year evaluation of SVE effectiveness. Regional Board staff conditionally approved the workplan on 1/14/94. Spectra-Physics also proposed a workplan for curtailment of the SVE systems near building 3. Regional Board action on this proposal will await the results of the soil investigation.

The Regional Board considered two NBAR options in September, and will be asked to approve a revised NBAR proposal in December. The state Remedial Action Plan is not complete without an NBAR. (Note: NBAR adopted by RWQCB at December meeting.)

Off-site activities continued at 1098 Alta Avenue, the Montwood site, and the Space Park Way site. At 1098 Alta, the Regional Board fined the discharger \$72,200

for violations of a Cleanup and Abatement Order on 9/21/94. The discharger has started interim remedial measures at the site. At the Montwood site, the discharger completed installation of a groundwater extraction and treatment system, which will discharge to Teledyne/ Spectra-Physics' off-site system. At the Space Park Way site, Regional Board staff requested site history data from prior owners and operators.

Next two quarters: Teledyne and Spectra-Physics will continue to implement the approved cleanup plan, and North Bayshore dischargers will continue investigation and interim remedial actions. Regional Board staff will continue investigating the North Bayshore area to determine the extent of other sites contribution to groundwater contamination in the area, and will work towards bringing these dischargers under a Regional Board order. With respect to the 1098 Alta Avenue site, the Regional Board will consider adopting Site Cleanup Requirements on 12/14/94 (Note: adopted at December Board meeting). With respect to the Space Park Way site, the Regional Board will consider adopting Site Cleanup Requirements in 2/95.

In the North Bayshore area, the parcel just south of the landfill will be developed in the near future, and the City of Mountain View has requested that Teledyne move some wells. Teledyne has requested that Montwood replace two extraction wells in this area, and Montwood is in the process of doing so. Redevelopment of this parcel may have other impacts on the North Bayshore dischargers in the future.

VAN WATERS & ROGERS, INC, 2256 JUNCTION AVENUE, SAN JOSE

The final RAP was approved on September 18, 1991 under Site Cleanup Order No. 91-138. The cleanup Plan consists of: soil vapor extraction (SVE) of accessible hot spots, extraction and treatment of groundwater in the A and B aquifers until cleanup standards are met, and long term monitoring.

During the last quarter, VW&R extracted and treated about 3.8 million gallons of groundwater, including an average of 9,710 gallons per day from the A-aquifer and 32,120 gallons per day from the B-aquifer. Chemical concentrations remained similar to the previous quarters. VW&R's NPDES permit was rescinded on July 20, 1994. VW&R's discharge is now regulated under RWQCB NPDES general permit for discharges from cleanup efforts involving VOCs in groundwater.

During the next six months, SVE and extraction will continue. VW&R will submit a soil characterization workplan to investigate the soil around the and underneath their onsite underground storage tanks.

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Because of the physical layout of their underground tank farm, soil investigations underneath the tanks are very difficult. However, due to new techniques in diagonal

and lateral drilling methods, soil investigation may be possible at the site. VW&R will include these new techniques in their workplan.

US EPA and CAL/EPA – DTSC LEAD SITES: ***(RWQCB is the support agency)***

JASCO, MOUNTAIN VIEW

EPA issued the ROD in September 1992. The cleanup plan calls for expanded groundwater extraction, treatment prior to POTW discharger, deed restriction prohibiting wells in shallow groundwater, and ex-situ bioremediation of soils. EPA issued an administrative order for Remedial Design/Remedial Action in December 1992. EPA has approved Jasco's request to pilot-test an alternative approach: air sparging and soil vapor extraction.

During the last quarter, cleanup activities continued at this site, including interim groundwater extraction with POTW discharge.

During the next six months, Jasco will implement pilot testing of air sparging and soil vapor extraction. EPA staff will continue reviewing Jasco design documents. EPA's response is likely to depend on the results of the pilot testing. Minimal activity by RWQCB staff is expected.

LIQUID GOLD, 580 FWY NEAR HOFFMAN MARSH, RICHMOND, CONTRA COSTA COUNTY

Current Status: In June 93 and June 94, Cal/EPA-DTSC approved the proposed remedial action plan and its associated design. The proposed remedial action consisted of excavated sediment from the drainage channels, placing the excavated sediment on the former activity area of the site, and covering this area with two feet of clean soil.

These field activities have been completed. Seeding of the site and care of the new vegetation is expected to continue into the Fall. During these activities, an underground storage tank was located and removed with county oversight. Regional Board staff concerns regarding control of runoff and removed sediment were adequately addressed.

Projected Activities: Over the next six months, the effectiveness of these corrective actions will be evaluated through monitoring activities conducted at the site. Minimal RWQCB staff activity is expected.

LORENTZ BARREL AND DRUM, SAN JOSE

The Record of Decision (ROD) for the shallow groundwater at the site was signed by the EPA in September 1988.

No actions by the RWQCB this quarter. Minimal activity expected for next several quarters.

MIDDLEFIELD-ELLIS-WHISMAN SITES, MOUNTAIN VIEW

EPA adopted a cleanup plan for the MEW area in June 1989. In mid-1991, EPA and two of the companies - Intel and Raytheon - signed a consent decree covering implementation of final cleanup activities; it received court approval in April 1992. EPA issued a unilateral enforcement order to Fairchild and other MEW dischargers in November 1990.

Various responsible parties at the site are submitting RD/RA reports in response to the unilateral order or the consent decree. The companies have proposed a regional remediation system (south and north of Highway 101); the system north of Highway 101 is closely linked to cleanup activities at Moffett Field Naval Air Station.

During the last quarter, interim remediation continued at several MEW on-site areas. Fairchild, Raytheon, and Intel collectively extracted and treated 20 million gallons of contaminated groundwater, discharging 17 million gallons to surface waters and reusing the remainder. EPA staff approved final source control plans for portions of the Fairchild and Raytheon sites.

During the next six months, the companies will continue RD/RA tasks and interim remediation. EPA expects to complete its review of remaining source-control plans shortly. EPA will then review the final design for the regional system (both south and north of Highway 101). Design of a reuse project will wait until source-control and regional-system designs are completed; NASA Ames is a big potential user of treated groundwater.

Minimal RWQCB staff activity expected.

Task E2 - Site Oversight (cont.)

MOFFETT FIELD NAVAL AIR STATION, MOUNTAIN VIEW / SUNNYVALE (DOD FACILITY)

Not part of South Bay MSCA.

UNITED HECKATHORN (AKA: LEVIN METALS), 402 WRIGHT AVENUE, RICHMOND, CONTRA COSTA COUNTY

Current Status: The Final Feasibility Study prepared by Batelle for US EPA, was submitted in July 1994, and the Final Human Health Risk Assessment was completed on May 27, 1994. These reports basically reflect the draft versions. The proposed cleanup plan consists of removing pesticide-contaminated sediments in Lauritzen and Parr Canals to 1 ppm cleanup level. This cleanup level is based on protection of human health and fish-eating birds for fish consumption.

On August 2, 1994, Regional Board staff attended the public meeting announcing the proposed cleanup plan. Many of the public comment and questions related to the safety of eating fish caught in Richmond Inner Harbor, and if the existing warning signs posted at Lauritzen and the mouth of Parr were sufficient enough to protect the public. The signs are posted in four languages - English, Spanish, Laotian, and Vietnamese.

Projected Activities for Six Months: The US EPA will enter into negotiations with the PRPs on remediation of the site. If, at the end of 120 days, no agreement can be reached, EPA will perform the remediation and go for cost recovery. In addition, cost-recovery for resource damage will be considered. Minimal RWQCB staff activity expected.

EPA adopted a cleanup plan for the MEW area in June 1989. In mid-1991, EPA and two of the companies - Intel and Raytheon - signed a consent decree covering implementation of final cleanup activities; it received court approval in April 1992. EPA issued a unilateral enforcement order to Fairchild and other MEW dischargers in November 1990.

Various responsible parties at the site are submitting RD/RA reports in response to the unilateral order or the consent decree. The companies have proposed a regional remediation system (south and north of Highway 101); the system north of Highway 101 is closely linked to cleanup activities at Moffett Field Naval Air Station.

During the last quarter, interim remediation continued at several MEW on-site areas. Groundwater treatment units at Fairchild, Raytheon, and Intel collectively

discharged about 15 million gallons to surface waters. A new EPA project manager was assigned in May.

During the next six months, the companies will continue RD/RA tasks and interim remediation. EPA expects to review final plans for Fairchild source-control facilities by September, and other source-control facilities shortly thereafter. EPA will then review the final design for the regional system (both south and north of Highway 101). Design of a reuse project will wait until source-control and regional-system designs are completed; NASA Ames is a big potential user of treated groundwater.

WESTINGHOUSE, SUNNYVALE

The Record of Decision for this EPA lead site was signed on October 16, 1991. EPA reached agreement with Westinghouse to start remedial design in February 1992.

EPA and Westinghouse have failed to reach agreement for a Consent Decree for final remedial action. Instead, EPA issued an administrative order in September 1993 that compels Westinghouse to perform the full-scale cleanup plan as designed. The remedial design package was finalized and submitted to EPA during March 1994.

Activities this quarter: Shakedown of the pilot groundwater treatment and extraction system started December 30, 1992, and the system has been operating since then. During the third quarter 1994 approximately, 457,885 gallons of groundwater was extracted. Approximately 2.76 pounds of PCBs were removed during the third quarter, bringing the total removed since startup to approximately 16.20 pounds. Initial system discharge is to the City of Sunnyvale's sanitary sewer. Full scale groundwater extraction and treatment is scheduled for early 1995.

Projected events for the next two quarters: The discharger plans to complete UST tank removal and PCB area soil excavation activities, and complete installation of extraction wells. Board staff plan to draft the NPDES permit for the discharge of extracted, treated groundwater for the site. Some controversy may be expected concerning potential PCB discharge, even at low quantities and concentrations.

Preparation of the draft remedial action work plan, which started in the first quarter, will continue, as will preparation of the draft remedial action health and safety plan and draft construction quality assurance project plan.

STATUS OF REGIONAL BOARD MSCA SUPPORT CONTRACTS

**DATA VALIDATION
(INTERAGENCY AGREEMENT W/CSDHS)**

The data validation agreement called for the California Department of Health Services (DHS) to conduct data validation on analytical data from selected groundwater samples for eighteen Superfund sites. To date, DHS has reviewed 36 data validation packages from MSCA sites. Most sites have undergone at least two rounds of data validation.

The data validation agreement expired in 1992. A new agreement will be negotiated if further data validation is needed.

**BASELINE PUBLIC HEALTH EVALUATION
CONTRACT (W/ICF CLEMENT)**

The contract is expired and is not expected to be renewed. RWQCB will use in-house (RWQCB or US EPA) toxicologist if necessary during the next year.

TECHNICAL ASSISTANCE CONTRACT

The contract is expired but may be re-advertised depending upon needs to be determined at a later date.

SUPERFUND LABORATORY CONTRACT

The Superfund lab contract expired June 30, 1993, and is not expected to be renewed. Minimal activity is expected in this area compared to past activities. Where sampling and analyses is required at MSCA site, RWQCB staff will utilize existing RWQCB contracts and bill MSCA accordingly.